



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/575,956

11/21/2006

Arto Huotari

966934.00002

6749

32256

7590

10/04/2010

PATTON BOGGS, LLP
8484 WESTPARK DR.
9TH FLOOR
MCLEAN, VA 22102

EXAMINER

MAI, HAO D

ART UNIT

PAPER NUMBER

3732

MAIL DATE

DELIVERY MODE

10/04/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/575,956	Applicant(s) HUOTARI ET AL.	
	Examiner HAO D. MAI	Art Unit 3732	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 June 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-13 is/are allowed.
- 6) ☒ Claim(s) 14-21 is/are rejected.
- 7) ☒ Claim(s) 22-24 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. The restriction requirement as set forth in the Office Action mailed on 08/18/2009 is hereby withdrawn; and claims 14-24 are hereby rejoined and fully examined for patentability under 37 CFR 1.104.

In view of the withdrawal of the restriction requirement, applicant(s) are advised that if any claim presented in a continuation or divisional application is anticipated by, or includes all the limitations of, a claim that is allowable in the present application, such claim may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application.

Once the restriction requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. See *In re Ziegler*, 443 F.2d 1211, 1215, 170 USPQ 129, 131-32 f(CCPA 1971). See also MPEP § 804.01.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. **Claims 14-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Holsclaw et al. (6,482,370).**

Regarding claim 14, Holsclaw et al. discloses a method for feeding water to the instruments of a dental unit and/or other points of use of water of a dental unit, wherein the unit

Art Unit: 3732

(Fig. 1) comprises a feed water line 12 for leading water to one instrument and/or to other points of use of water of the dental unit. The unit further comprises pressure chamber 20, upstream of said points of use of water 33, and is in connection with a compressed air line (column 2 lines 58-61; column 10 lines 53-56); the pressure chamber 20 being arranged in functional connection with pressure control means, e.g. 36 or 38 (column 5 lines 54-58). Note that the feed water line 12 inherently has a pump capable of pumping/flowing water from the city water source to and against the pressure prevailing in the pressure chamber 12. **As to claim 15**, the pressure control means 36 is a valve capable of leading and purging air to and from the pressure chamber 20.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Holsclaw et al. (6,482,370) in view of Moore (3,014,620).**

Holsclaw et al. disclose the invention substantially as claimed except for the valve comprising at least one three-way valve. Moore discloses a water/pressure chamber 10 having a compressed air line 15 with a three-way valve 14 for introducing compressed air from a compressor 15 into chamber 10 and to exhaust air, e.g. by connecting the chamber to atmospheric pressure (Figure; column 2 lines 58-62). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Holsclaw et al. by utilizing a

Art Unit: 3732

three-way valve in order to lock the chamber from communication with any pressure and connecting two different types of pressures to the chamber. Furthermore, such modification would have been a substitution of well known alternative valves which is within the skill of an artisan while yielding the same and/or predictable results.

6. Claims 17-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holsclaw et al. (6,482,370) in view of Yamada et al. (5,151,731).

Holsclaw fail to disclose the pressure chamber having a means for recognizing height of the fluid level and a water storage beside the pressure chamber. Yamada et al. disclose water replenishing system (Fig. 6) for tanks 121, 122, and 123, wherein a water storage tank 180 receives city water as needed under the control of a valve 186, by detecting the volume of water in the tank 180 dropping below a predetermined level (column 9 lines 1-15). **As to claim 17**, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Holsclaw et al. by including means for recognizing/detecting height of the fluid level in the pressure chamber so that the chamber can be refilled, e.g. by the city water source, according to the signals from the fluid height detecting means as explicitly taught by Yamada et al. **As to claim 18**, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Holsclaw et al. by including a water storage for storing water from the city line before being pumped into the pressure chamber so that the pressure chamber can be readily replenished as taught by Yamada et al. **As to claims 19-20**, note that the fluid height detection mechanism as disclosed by Yamada et al. is equivalent to the claimed means and/or structure to ensure that the fluid level cannot rise higher than desired. Furthermore, as to Yamada et al. show in Figures 1-5 various water storage chamber, e.g. 2 in Fig. 5, being open to atmospheric pressure, and having a feed link for the water to be fed into the chamber

Art Unit: 3732

from an external source. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the storage tank 180 of Figure 6 being open to atmospheric pressure as a choice well within the skill of an artisan while yielding the same results. **As to claims 21**, Yamada et al.'s Fig. 7 shows chemical/detergent feed links 4a-4b into storage tank 12; it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Figure 6's storage tank 180 with such chemical/detergent feed links if required by the procedure.

Allowable Subject Matter

7. **Claims 1-13** are allowed.
8. **Claims 22-24** would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Response to Arguments

9. Applicant's arguments with respect to the restriction requirement have been fully considered and are persuasive. Accordingly, the restriction requirement has been withdrawn as indicated above. Amendments to the apparatus claims 1-13 have overcome the cited prior art and therefore are allowable as indicated above.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HAO D. MAI whose telephone number is (571)270-3002. The examiner can normally be reached on Monday-Friday. If attempts to reach the examiner by telephone are

Art Unit: 3732

unsuccessful, the examiner's supervisor, Cris Rodriguez can be reached on (571) 272-4964.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

**/Hao D Mai/
Examiner, Art Unit 3732**

**/Cris L. Rodriguez/
Supervisory Patent Examiner, Art Unit 3732**